2001-610074/70 B04 D16 **KYOW 2000.03.06**
KYOWA HAKKO KOGYO KK *JP 2001245666-A
2000.03.06 2000-060548(+2000JP-060548) *(2001.09.11)* C12N 15/09, A01H 5/00, A01K 67/027, A61K 39/395, 45/00, A61P 25/00, 35/00, C12P 21/02, G01N 33/15, C12Q 1/68, G01N 33/566, 33/53, 33/50, C07K 14/705, 16/28, C12N 1/15, 1/19, 1/21, 5/10 // C12P 21/08 (C12P 21/02, C12R 1:91)

New G protein-coupled receptor polypeptide for use in the development of new drugs

C2001-182104

B(4-A8E, 4-C1G, 4-E3D, 4-E8, 4-F1E, 4-K1, 4-K1E, 4-P1E, 14-L1, 14-L6) D(5-C12, 5-H12A, 5-H12E, 5-H14, 5-H16A, 5-H16B, 5-H17A4, 5-H17B4) .9

NOVELTY

A G protein-coupled receptor (GPCR) polypeptide having a sequence (S1) of 371 amino acids, given in the specification, is new.

DETAILED DESCRIPTION

INDEPENDENT CLAIMS are also included for the following:

(1) a polypeptide having an amino acid sequence in which at least one amino acid is deleted, replaced or added in S1 and having an activity substantially same as the above polypeptide;
(2) a partial peptide of the above GPCR polypeptide having combinability to a ligand, an agonist, an antagonist or a function-modifying substance of the polypeptide;
(3) a DNA encoding the above GPCR polypeptide;
(4) a DNA having a sequence of bases 175 to 1287 in a sequence of 1714 base pairs (bp), given in the specification;
(5) a DNA hybridizing with the above DNA under a stringent condition and encoding a polypeptide having an activity substantially the same as the above GPCR polypeptide;
(6) a DNA encoding a partial peptide of the above GPCR polypeptide; and
(7) a recombinant DNA prepared by recombining the above DNA to a vector; and
(8) a transformed cell, a transformed plant or a transformed nonhuman animal carrying the above recombinant DNA.

USE

The GPCR polypeptide can be used for the development of new drugs.

EXAMPLE

JP 2001245666-A+

A cDNA encoding a new G protein-coupled receptor (GPCR) (KATO6734L polypeptide) was cloned. Thus, a KATOIII cell-derived cDNA library was prepared. It was randomly sequenced. The total base sequence of KATO6734 cDNA was determined. The total length cDNA (KATO6734L cDNA) was obtained from human thalamus. (126pp097DwgNo.0/16)

JP 2001245666-A

79050A/44 B04 A11 D22 (A96) MEIT 10.03.77
MEITO SANGYO CO KK *J5 3110-693
10.03.77-JA-026445 (27.09.78) C08b-37/02
Polymeric electrolyte complex prepn. - giving a prod. which can be easily moulded with other materials and can be used as a haemostat

Prodn. of a polymeric electrolyte complex (PEC) comprises reaction of dextran partially substituted by anionic group (I) with polysaccharide partially substituted by cationic group (II) or gelatin (III) under acidic conditions.

USE/ADVANTAGE
The product is useful as medicine or material for medical treatment and is superior to the conventional PEC in that the product can be easily moulded in combination with other materials and can be used as a haemostatic material.

DETAILS
(I) may typically be dextran sulphate, carboxymethyl dextran, dextran phosphate or sulphopropyl dextran of 0.1-3 mol/ A.G.U. substitution degree. (II) may typically be chitosan or various opt. substd. aminoalkyl ethers of dextrans having 0.1-3 mol/A.G.U. substitution degree. The reaction of (I) with (II) or (III), of 0.05-5% concentration, is carried out at various molar ratios at pH ⩽ 3 at 20-60°C for ca. 30-60 mins.

A(3-A, 3-C1, 10-E1, 12-M2, 12-V) B(4-B4A, 4-C2, 12-H4) D(9-C, 9-D). 3 90

EXAMPLE
Dextran sulphate (S content = 18.8%, limiting viscosity 0.274 dl/g), 0.1% aq. soln., 125 ml is mixed with 0.1% aq. soln. of chitosan (N content = 7.8%) of pH 0.26 (= 1% HCl conc.), and stirred at room temp. for ca. 30 mins. to give white precipitate, which is isolated by centrifugation or filtration, washed with water and then methanol and dried in vacuo. Yield: 219 mg (N content = 3.6%, S content = 10.37%, N/S molar ratio = 0.79).(4ppW38).

79050A J53110693

79053A/44 B04 A26 D16 MITU 09.03.77
MITSUBISHI CHEM IND KK *J5 3110-697
09.03.77-JA-025696 (27.09.78) C08g-79/04 C12d-13/06
High yield poly:guanylic acid prodn. - by polymerising guanosine di:phosphate in a polynucleotide phosphorylase obtd. from Thermus thermophilum Strain HB-8

Prodn. of polyguanylic acid comprises polymerizing guanosine diphosphate in the presence of polynucleotide phosphorylase obtained from Thermus thermophilum Strain HB-8 (ATCC 27634) (e.g., by incubating the strain in a culture medium at 60-85°C under aeration, grinding the cells with alumina, extracting the ground cells with a buffer solution contg. magnesium ion and purifying by electrophoresis through polyacrylamide gel). Polymsn. is in the presence of magnesium ion. The guanosine diphosphate may be used in an amount of 4-12 moles per mole of magnesium ion.

USES
None given.

ADVANTAGE
The process can produce polyguanylic acid in a high yield.

EXAMPLE
None given.(4ppW59).

A(3-C, 4-D4A, 6-B, 10-A, 12-E9) B(4-B3, 4-B4A, 4-C3B) D(5-A2, 5-C7). 3 91

79053A J53110697

79144A/44 B05 E14 NIJY-09.03.77
NIPPON IYORYU KOGYO *J5 3111-028
09.03.77-JA-024881 (28.09.78) C07c-51/33 C07c-63/06
Purifcn. of benzoic acid obtd. from toluene oxidn. - by heating with sulphuric acid, rectifying and heating resulting benzoic acid under pressure

Purification of benzoic acid comprises heating the crude product (pref. at 180-240°C) in the presence of sulphuric acid (pref. 0.3-3 parts by weight per 100 parts by weight of crude product), rectifying, and then treating the resultant benzoic acid at high temp. under reduced press. (pref. 50-100°C, ⩽ 200 Hg). The crude product is obtained from oxidation of toluene with molecular oxygen-containing gas at high temp. and high press. in liquid phase followed by distillation to recover unreacted toluene.

USE/ADVANTAGE
Benzoic acid is used widely and in large scale in the mfr. of antiseptic food additives, aniline dyes, pharmaceuticals, perfumes, paints and mordants for printing. The process can remove malodorous by-products with minimal water- and-air pollution.

EXAMPLE
Toluene is oxidized with air in acetic acid in presence of cobalt acetate at 150°C and 10 kg/cm² press. The reaction

B(10-C4C) E(10-C4C). 1 92

mixture is distilled at 110-200°C under ordinary pressure to recover unreacted toluene and give crude benzoic acid product. The resultant crude product (100 parts by weight) is stirred for 6 hrs. with dropwise addition of 1 part by weight 98%-H_2SO_4 and rectified at 186°C under 100 mmHg to give powdery benzoic acid containing 0.12% by-products including biphenyl. The resultant powder is stirred for 8 hrs. at 85°C under reduced press. (10 mm Hg) to give odorless benzoic acid containing ⩽ 0.01% by-product including biphenyl.(4ppW38).

79144A J53111028